

IN THE CLAIMS:

1. (Currently Amended) Gear for a robot having a drive shaft and at least two first and second parts rotatable relative to the drive shaft and to one another, in which a movement of the first part is removable on a first end side remote from the second part, characterized in that at least one of the first parts part has a reference shaft connected in non-rotary manner thereto and which projects at least to the other part, said movement of said first part is additionally removable by means of said shaft on a second side facing said second part and remote from said first end side, an axis of said reference shaft is radially spaced from an axis of said drive shaft; a bearing rotatably connects said first and second parts.

5 2. (Currently Amended) Gear according to claim 1, wherein: the shaft located on one part traverses the other part to its side (4b, 3b) remote from the one part.

3. (Withdrawn) Gear according to claim 1, wherein: the shaft located on the one part is the drive of the a sensor device located in and/or on the other part.

4. (Withdrawn) Gear according to claim 3, wherein: the sensor device is a monitoring device for determining and/or limiting the rotation parameters.

5. (Withdrawn) Gear according to claim 3, wherein: the sensor device has a stub shaft guided in a receptacle and determines the rotation angle between stub shaft and receptacle.

6. (Withdrawn) Robot Gear according to claim 5, wherein: the a receptacle of the sensor device is located on one part and the stub shaft is connected in non-rotary manner to the shaft located on the other part.

7. (Withdrawn) Robot Gear according to claim 3, wherein: an optical sensor device is provided.

8. (Withdrawn) Robot Gear according to claim 3, wherein: a magnetic sensor device, particularly a resolver is provided.

9. (Withdrawn) Robot Gear according to claim 3, wherein: an electrical or electromagnetic sensor device is provided.

10. (Withdrawn) Robot Gear according to claim 3, wherein: a torque compensator connected to the sensor device is provided for the robot rotation axis.

11. (Previously Presented) Gear according to claim 1, wherein: the shaft located on one part is subject to a torque.

12. (Withdrawn) Gear according to claim 11, wherein: an auxiliary motor is provided on the shaft.

13. (Previously Presented) Gear according to claim 1, wherein: the drive shaft is a high speed side driven shaft of a drive motor or is connectable thereto.

14. (Previously Presented) Gear according to claim 1, wherein: the rotary parts are movable at a lower speed than the drive shaft.

15. (Previously Presented) Gear according to claim 1, wherein: the shaft is positioned coaxially to the rotation axis of at least one of the parts.

16. (Previously Presented) Gear according to claim 1, wherein: the parts are positioned coaxially.

17. (Currently Amended) Gear according to claim 1, wherein: the gear is ~~an~~ in particular a high speed reducing spur, bevel, worm or epicyclic gear.

18. (Previously Presented) Gear according to claim 1, wherein: the gear is a harmonic drive gear.

19. (Withdrawn) Gear according to claim 1, wherein: the drive motor is positioned centrally to the rotation axis of at least one of the parts.

20. (Previously Presented) Gear according to claim 1, wherein: the drive motor is positioned eccentrically to the rotation axis of at least one of the parts.

21. (Previously Presented) Gear according to claim 1, wherein: the drive motor is positioned under a finite angle with respect to the rotation axis of at least one of the parts.

22. (Withdrawn) Gear according to claim 21, wherein: the drive motor is placed approximately under a right angle with respect to the rotation axis of at least one of the parts.

23. (Previously Presented) Gear according to claim 1, wherein: one part is constructed as a gearbox and the other part as a gear shaft.

24. (Currently Amended) Robot, wherein comprising: at least one gear according to one of the claims 1 to 23.

25 - 34 (Canceled)